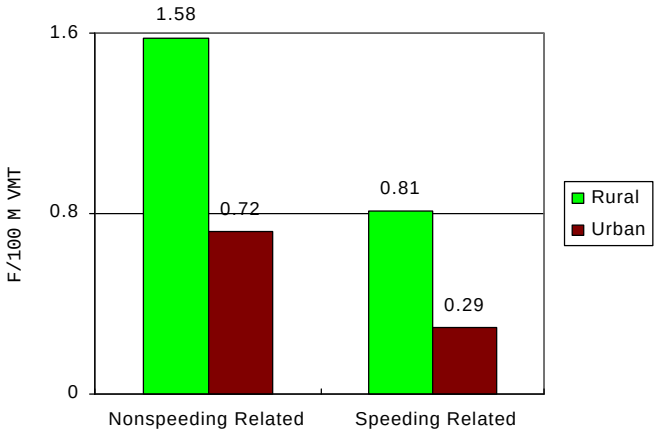
U.S. Department of Transportation
Federal Highway Administration

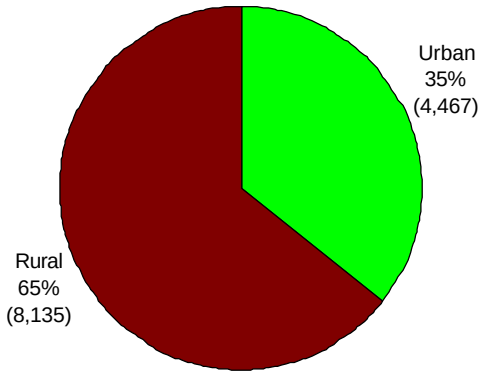
Speeding in Rural Areas

Census data continue to show America is an increasingly urban society. More of us now live in cities, planned communities, and suburban areas than in rural areas. Not surprisingly, we travel more on urban roads than on rural roads (1,592,057 million vehicle miles [M VMT] are driven annually in urban areas, compared with 1,033,310 M VMT in rural areas). However, in 1998, 61 percent of all U.S. motor vehicle fatalities and 65 percent of all speeding-related fatalities occurred on rural roads.* As seen in the figure below, 2 out of every 3 speeding-related fatalities occur in rural areas.

Speeding — driving too fast for conditions or exceeding the legal speed limit — is a problem on all roadways nationwide. But, on the less-forgiving rural roadways, speeding takes a deadly toll.



Rate of Speeding-Related Fatalities by Road Class (Fatalities per 100M VMT) (1998, U.S.)



Distribution of Speeding-Related Fatalities by Road Class (1998, U.S.)

Fatal Consequences of Speed on Rural Roads

As seen in the bar graph opposite, fatality rates on rural roads are much higher than fatality rates on urban roads. The difference is much more pronounced for speeding-related rates than for nonspeeding-related rates. The reasons for the dramatic difference in fatality rates on rural and urban roadways reflect several factors related to crashes on rural roads. First, there is a higher incidence of severe crashes, including run-off-road and rollover crashes. Second, rough terrain, less vehicle traffic, longer intervals between a crash and time of discovery, and lower level of available trauma care tend to make the injury outcomes for rural travelers more severe.

Fatality Statistics Vary According to Roadway Type

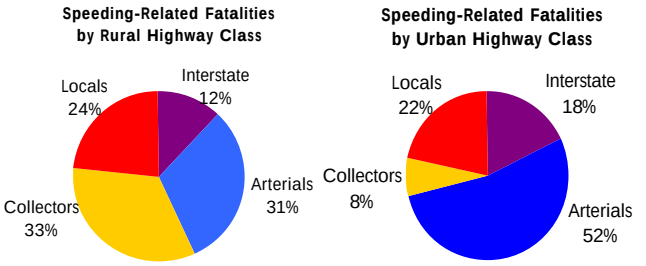
Across both rural and urban areas of the United States, very few speeding-related fatalities occur on the Interstates — the roadways with the highest posted speed limits. Rural Interstates, in particular, usually have the highest speed limits of any roadway in a State. Almost 1 in 4 speeding-related fatalities occurs on local roads, in both urban and rural areas. Yet rural areas differ from urban areas in speed-related statistics (see pie charts next page).

Frequency

The pie charts below show the distributions of speeding-related fatalities by road class. For example, in urban areas,

* The definition of "urban" used in this publication complies with the Congressional definition used in Federal-aid legislation. As a minimum, an urban area includes a census place with an urban population of 5,000 to 49,000, or a designated urban area with a population of 50,000 or more. "Rural" is defined as anything not urban.

crashes on arterials account for more than half of all speeding-related fatalities. In rural areas, fatalities on arterials account for less than a third of all speeding-related fatalities.



This finding undoubtedly reflects differences in the number of miles of arterial roads in urban areas versus rural areas and the different traffic volumes carried in urban versus rural areas. We can normalize or adjust for these differences by comparing fatality rates per 100 M VMT.

Rates

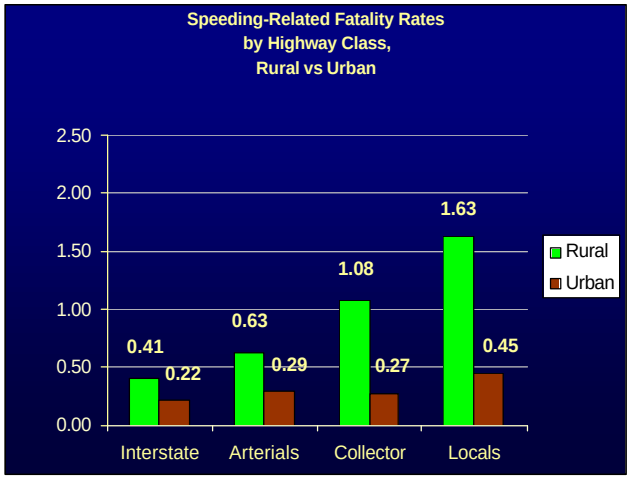
As the graphs below illustrate, speeding-related fatality rates in rural areas are frequently double — or triple — those in urban areas. Collectors and locals have the highest rates and show the greatest differences between rural and urban rates. Collectors show the greatest differences. In rural areas, crashes on collectors account for one-third of speeding-related fatalities and have a speeding-related fatality rate of 1.08. By contrast, urban-area collectors account for only 8 percent of speeding-related fatalities and have a speeding-related fatality rate of 0.27.

The fatality rates for speeding-related crashes in rural areas increase progressively as the road function class lowers. This is in contrast to the nonspeeding-related fatality rates on rural areas — rural rates rise sharply off the Interstates (more than double) and remain relatively high.

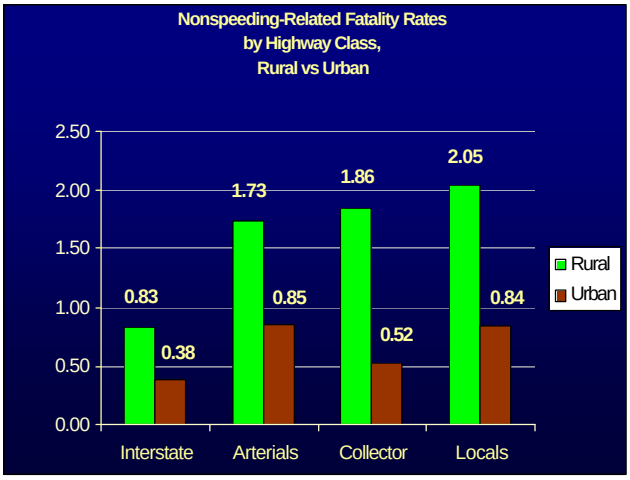
Where We Drive Makes a Difference

Many rural roads evolved from farm roads upgraded to accommodate increased traffic volumes and vehicle size. In many areas, farmers, commuters, school buses, trucks, and tourists share roads with narrow lanes, limited sight distance, less enforcement, and lack of clear roadsides. In rural areas, legal speeds on collector and local roads are often higher than their urban counterparts. On rural roads, unlike urban roads, traffic is not often slowed by frequent traffic signals, stop signs, and traffic congestion.

SPEEDING COUNTS . . . on all roads, but speeding in rural areas can have more tragic consequences than in urban areas. Drivers on rural roads become crash statistics when they fail to adjust their travel speeds to roadway characteristics, weather, or traffic conditions.



Fatalities per 100 M VMT



Fatalities per 100 M VMT